

No.

7800082



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Quali-Sel, Inc.

**Whereas, THERE HAS BEEN PRESENTED TO THE
Secretary of Agriculture**

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *seventeen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR PROPAGATING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

LETTUCE

'Amaral 78'



In Testimony Whereof, I have hereunto set
my hand and caused the seal of the Plant
Variety Protection Office to be affixed
at the City of Washington
this 31st day of May in
the year of our Lord one thousand nine
hundred and seventy-nine

Attest:

Lyndon B. Johnson
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

B. B. Johnson
Secretary of Agriculture

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, POULTRY, GRAIN & SEED DIVISION

FORM APPROVED
OMB NO. 40-R3822

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

1a. TEMPORARY DESIGNATION OF VARIETY		1b. VARIETY NAME AMARAL 78		FOR OFFICIAL USE ONLY PV NUMBER 7800082	
2. KIND NAME LETTUCE		3. GENUS AND SPECIES NAME LACTUCA SATIVA L.		FILING DATE 6-5-78	TIME 3:00 P.M.
4. FAMILY NAME (BOTANICAL) COMPOSITAE		5. DATE OF DETERMINATION JUNE 1, 1977		FEE RECEIVED \$ 500.00 \$ 250.00	DATE 6-5-78 5-9-79
6. NAME OF APPLICANT(S) QUALI-SEL, INC.		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) 11. West Laurel Drive Suite 125 Salinas, California 93906		8. TELEPHONE AREA CODE AND NUMBER (408) 443-1013	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) CORPORATION			10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION CALIFORNIA		11. DATE OF INCORPORATION March 1, 1972
12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS: Quali-Sel, Inc. 11. W. Laurel Drive Suite 125 Salinas, California 93906					

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- ☒ 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)
- ☒ 13B. Exhibit B, Novelty Statement.
- ☒ 13C. Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)
- ☒ 13D. Exhibit D, Additional Description of the Variety.

14a. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See Section 83(a). (If "Yes," answer 14B and 14C below.) ☐ YES ☒ NO

14b. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? ☐ YES ☒ NO

14c. IF "YES," TO 14B, HOW MANY GENERATIONS OF PRODUCTION BEYOND BREEDER SEED? ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

15a. DID THE APPLICANT(S) FILE FOR PROTECTION OF THIS VARIETY IN OTHER COUNTRIES? ☐ YES ☒ NO (If "Yes," give name of countries and dates.)

15b. HAVE RIGHTS BEEN GRANTED THIS VARIETY IN OTHER COUNTRIES? ☐ YES ☒ NO (If "Yes," give name of countries and dates.)

16. DOES THE APPLICANT(S) AGREE TO THE PUBLICATION OF HIS/HER (THEIR) NAME(S) AND ADDRESS IN THE OFFICIAL JOURNAL? ☐ YES ☒ NO

17. The applicant(s) declare(s) that a viable sample of basic seed of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

May 26, 1978

(DATE)

(SIGNATURE OF APPLICANT)

KENNETH L. DUBAS

INSTRUCTIONS

GENERAL: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$500 fee (\$250 filing fee and \$250 examination fee) to U.S. Dept. of Agriculture, Agricultural Marketing Service, Livestock, Poultry, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

- 5 Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.
- 13a Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.
- 13b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- 13c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.
- 13d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as, plant habit, plant color, disease resistance, etc.
- 14a If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "NO," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)
- 15a See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.



QUALI-SEL, INC.

7800082

VARIETY: AMARAL 78

EXHIBIT A

Origin and Breeding History of the Variety

1. AMARAL 78 originated from an individual plant selection made from Salinas in 1975. The selection was made by Quali-Sel Seeds personnel in the San Joaquin Valley of California.
2. Trial plantings were conducted in 1976 to allow for selection work. The selections were based on color and heading ability. Trial plantings were conducted in Arizona and the Salinas and San Joaquin Valleys of California.
3. The trialing was repeated in 1977 to evaluate for uniformity and the desired plant type.
4. AMARAL 78 is genetically uniform and free of any distinct variations.



QUALI-SEL, INC.

7800082

VARIETY: AMARAL 78

EXHIBIT B

DATA INDICATIVE OF NOVELTY

AMARAL 78 most closely resembles the variety, Salinas. The distinguishing features include:

1. The color of AMARAL 78 is a more glossy green than Salinas.
2. The butt color is a darker green than Salinas.
3. The leaf petiole is somewhat wider than Salinas.
4. The core diameter is wider than Salinas.



7800082

QUALI-SEL SEEDS

A Subsidiary of Quali-Sel, Inc.

SALINAS, CALIFORNIA • ~~XXXXXXXXXX~~ • TELEPHONE (408) 422-6489
1143 MADISON LANE

April 2, 1979

United States Department of Agriculture
Plant Variety Protection Office
National Agricultural Library
Beltsville, Maryland 20705

Attn: Mr. H.H. Fisher

Dear Mr. Fisher:

Subject: Lettuce Application No. 7800082, 'Amaral 78'

Enclosed is some additional comparative data on Amaral 78 that you requested.

The maturity of Amaral 78 is 3 days earlier than Salinas based on a planting date in March.

The color values using the Royal Horticultural Society Colour Chart is 143B for Amaral 78 and 143C for Salinas. This trait is very apparent in the seed stalk.

Sincerely yours,

Kenneth L. Dubas
Research Director

KLD/aa

Attachment



7800082

<u>Core</u>	<u>Diameter</u>	<u>Core</u>	<u>Length</u>	<u>Head</u>	<u>Diameter</u>
Amaral 78	Salinas	Amaral 78	Salinas	Amaral 78	Salinas
3.8 cm	3.7 cm	5.1 cm	5.1 cm	14.0 cm	15.3 cm
3.7	3.4	3.8	5.7	13.3	14.0
3.8	3.5	5.1	5.7	14.0	12.7
3.5	3.6	3.8	4.4	12.1	14.2
3.4	3.5	5.1	6.3	14.0	13.8
3.5	3.5	3.8	5.1	13.4	14.1
3.7	3.6	4.4	5.0	14.1	12.6
3.8	3.3	3.9	5.2	13.3	14.0
3.3	3.3	3.7	4.5	12.8	15.4
<u>3.4</u>	<u>3.0</u>	<u>5.0</u>	<u>3.9</u>	<u>14.1</u>	<u>12.6</u>
AVE. 3.6 cm	3.4 cm	4.4 cm	5.1 cm	13.5 cm	13.9 cm

OBJECTIVE DESCRIPTION OF VARIETY
(LETTUCE)Lactuca
sativa

INSTRUCTIONS: See reverse.

NAME OF APPLICANT(S):

Quali-Sel, Inc.

ADDRESS (Street and No., or R.F.D., Box, City, State, and ZIP Code)

11 W. Laurel Drive Suite 125
Salinas, California 93906

FOR OFFICIAL USE ONLY

PVPO NUMBER

297-1-

7800082

VARIETY NAME OR TEMPORARY
DESIGNATION

AMARAL 78

Place the appropriate number that describes the varietal character of this variety in the boxes below.

1. PLANT TYPE:

10 = CUTTING (Leaf)

20 = STALK

50 = BUTTERHEAD

60 = LATIN

70 = OTHER (Specify)

30 = COS

31 = SELF-CLOSING
GROUP32 = LOOSE-CLOSING
GROUP

40 = CRISPHEAD

41 = IMPERIAL GROUP

42 = GREAT LAKES GROUP

43 = VANGUARD

44 = NEW YORK GROUP

2. SEED COLOR:

1 = WHITE 2 = BLACK 3 = YELLOW

3. ANTHOCYANIN:

1 = ABSENT 2 = PRESENT

4. LEAF CONTAINING ANTHOCYANIN:

1 = COVERED 2 = SPOTTED 3 = ALONG MARGIN 4 = ABSENT 5 = OTHER (Specify)

5. LEAF SURFACE TEXTURE:

1 = SMOOTH 2 = BLISTERED

6. LEAF SURFACE REFLECTANCE:

1 = DULL 2 = GLOSSY 3 = OTHER (Specify)

7. LEAF MARGIN:

1 = STRAIGHT 2 = WAVY
3 = CURLED1 = ENTIRE 2 = DENTATE 3 = INCISED
4 = DEEPLY INCISED 5 = OTHER (Specify)

8. LEAF SHAPE:

1 = ROUNDED 2 = POINTED

1 = BROADER
THAN LONG 2 = LONGER
THAN BROAD 3 = OTHER (Specify)

9. LEAF COLOR: (See reverse.)

1 = RED 2 = REDDISH-BROWN 3 = YELLOW 4 = YELLOWISH-GREEN 5 = GREYISH-GREEN
6 = BLUE-GREEN 7 = DARK-GREEN 8 = VERY DARK GREEN

10. HEADS:

1 = SPHERICAL 2 = FLATTENED 3 = ELONGATE
4 = POINTED 5 = NON-HEADING

11. PLANT SIZE: (See reverse.)

1 = SMALL 2 = MEDIUM 3 = LARGE

12. CULTURE:

1 = SUMMER CROP 2 = WINTER CROP 3 = NOT SPECIFIC 4 = UNDER GLASS 5 = OTHER (Specify) Spring and Fall

13. SIZE OF 10-DAY OLD SEEDLING GROWN UNDER CONSTANT LIGHT (Growth Chamber) AT 25° C.: (Place a zero in first box (i.e., 012))

mm. LENGTH OF SEEDLING

mm. LENGTH OF COTYLEDON

mm. WIDTH OF COTYLEDON

14. DISEASE RESISTANCE TO: (Enter zeroes in box(es) where there is no special disease resistance.)

1 = TIPBURN

2 = MOSAIC

3 = DAMPING OFF

4 = DOWNY MILDEW

5 = SCLEROTINIA
ROT6 = BROWN
BLIGHT

7 = BIG VEIN

8 = OTHER (Specify)

15. OUTLINE THE FOURTH LEAF: (For standardization purposes, the fourth leaf should be taken from a 20-day old plant grown under constant light.)



7800082

FORM GR-471 (REVERSE)

16. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER		NAME OF VARIETY				
Leaf color		Salinas				
Leaf pigmentation		Salinas				
Leaf shape		Salinas				
Plant size		Salinas				
Head size		Salinas				
VARIETY	NO. OF DAYS TO HEAD MATURITY UNDER WINTER CROPPING	LOCATION	NO. OF DAYS TO HEAD MATURITY UNDER SUMMER CROPPING	LOCATION	NO. OF DAYS TO SEED STALK EMERGENCE UNDER SUMMER CROPPING	LOCATION
Submitted			Approx. 94	Salinas	Approx. 65	San Joaquin Valley, CA
Similar			Approx. 97	Salinas	Approx. 65	San Joaquin Valley, CA
Name of similar variety		Salinas		Salinas		

INSTRUCTIONS

GENERAL: The following publications may be used as a reference aid for completing this form:

1. C. M. Rodenburg, 1960, Varieties of Lettuce, An International Monograph, Instituut Voor de Veredeling van Tuinbouwgewassen, Wageningen, Holland.
2. L. L. Morse, 1930, Field Notes on Lettuce, published by Ferry-Morse Seed Co.

LEAF COLOR: Nickerson's or any recognized color fan may be used to determine the leaf color of the described variety. The following lettuce varieties may be used as a guide to identify the eight colors listed on the form.

Color	Variety
Red	"Salad Trim"
Reddish-brown	"Ruby"
Yellow	"Salad Bowl"
Yellowish-green	"Oakleaf"
Greyish-green	"White Boston"
Bluish-green	"Bibb"
Dark-green	"Imperial" group
Very dark green	"Deer Tongue"

PLANT SIZE: The following varieties may be used as a guide to identify the plant type size:

TYPE	COMPARABLE VARIETIES		
	SMALL	MEDIUM	LARGE
Cutting (leaf)	Boston-Curled	Prize Head	Grand Rapids
Stalk (stem)	Celtuce	--	--
Cos	Express	Parris Island	Giant White
Crisphead	Mignonette	Hanson (Merit)	Climax
Butterhead	Tom Thumb	Big Boston	Mammoth Butter
Latin	Sucrino	Creole	Deer Tongue



QUALI-SEL, INC.

7800082

VARIETY: AMARAL 78

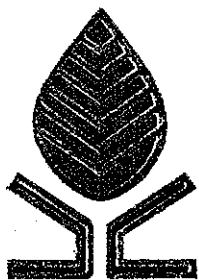
EXHIBIT D

BOTANICAL DESCRIPTION OF THE VARIETY

Annual: A crisphead variety with a medium size frame. The wrapper leaves are lightly savoyed with a glossy green color.

The head is spherical. The core diameter is wide. The petioles are wide. The variety is best adapted to the Salinas Valley.

The seed color is black.



Bruce Church, Inc.

November 8, 1988

United States Department of Agriculture
Agricultural Marketing Service
Warehouse and Seed Division - Plant Variety Protection Office
National Agricultural Library Bldg., Room 500
10301 Baltimore Boulevard
Beltsville, Maryland 20705

TO WHOM THIS MAY CONCERN:

Quali-Sel Seed has gone out of business, effective December 7, 1987. Would you please send future correspondence to Vic Heintzberger at:

Vic Heintzberger
Manager, Research & Development
Bruce Church, Inc.
P. O. Box 80599
Salinas, CA 93912-0599

Thank you.

Sincerely,

Jean Polk

Jean Polk
Bruce Church, Inc.

2-8-89

*Active Certificate
listed as Quali-Seli*

7400019

7400024

7600014

7800082

7800084

8000134

8200023

